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Problem description: One of the challenges for all pharmaceutical companies is to understand the persistence of drugs as per the physician's prescription. To solve this problem ABC Pharma company approached an analytics company to automate this process of identification

Business Understanding:

ABC Pharma Company faces a challenge in understanding the persistency of drug usage as per physician prescriptions. Persistency refers to the extent to which patients continue using a prescribed medication over a specific period of time. To address this challenge and automate the identification process, ABC Pharma Company has partnered with an analytics company.

The objective of this collaboration is to develop a solution that provides insights into the persistency of drug usage based on physician prescriptions. By automating this identification process, ABC Pharma Company aims to enhance their understanding of how patients adhere to prescribed medications. This understanding can help them make informed decisions regarding medication effectiveness, patient compliance, and treatment outcomes.

The solution provided by the analytics company will leverage data analysis techniques and advanced algorithms to analyze prescription data, patient records, and other relevant information. It will identify patterns and trends in drug persistency, allowing ABC Pharma Company to gain actionable insights and improve their decision-making processes.

By automating the identification of drug persistency, ABC Pharma Company can optimize their resources, enhance patient care, and potentially develop targeted interventions to improve medication adherence. This partnership with the analytics company demonstrates ABC Pharma Company's commitment to leveraging data-driven insights to address critical challenges in the pharmaceutical industry and improve patient outcomes.

Project lifecycle along with deadline:

- Problem understanding – 19-05-2023
- Data Understanding -19-05-2023
- Data Cleaning -26-05-2023
- Exploratory Data Analysis (Descriptive Statistics & Data Visualization) -09-06-2023
- Data Pre-processing – 16-06-2023
- Feature engineering - 23-05-2023
- Model Development -26-05-2023
- Model Selection – 27-05-2023
- Model Evaluation -29-05-2023
- Deploy the model – 30-05-2023
- Explain the challenges and model selection -30-05-2023